CMSC110 Introduction to Computing

Practice
Week of September 15, 2020

Due by midnight on your class day.

Answer the following questions.

1. Consider a canvas with size 500 x 500 pixels. Compute the centers, widths, and heights of the four circles in this drawing.

   
   Circle centers:
   
   #1: (0.25*width, 0.25*height) = (125, 125)
   #2: (0.75*width, 0.75*height) = (375, 375)
   #3: (0.25*width, 0.75*height) = (125, 375)
   #4: (0.75*width, 0.25*height) = (375, 125)

2. Write Processing code to draw the above image. Put all your code in setup().

   ```
   void setup() {
     size(500, 500); // need this
     ellipse (125, 125, 250, 250);
     ellipse (375, 125, 250, 250);
     ellipse (125, 375, 250, 250);
     ellipse (375, 375, 250, 250);
   }

   void draw() { optional for quit but ok to have??
   ```
3. The coordinate system below extends from (0,0) to (500,500). Thin lines correspond to increments of 25. Thick lines to increments of 100. On the image, label the following:

- X-Axis
- Y-Axis
- The origin
- The point (500,500)
- The point (100, 150)
- The point (400, 150)
- The point (150, 375)
- The point (250, 50)
- The point (350, 375)